

# Pre-enrollment Considerations of Undergraduate Wheelchair Users and their Post-enrollment Transitions

**Roger D. Wessel  
Darolyn "Lyn" Jones  
Christina L. Blanch  
Larry Markle  
Ball State University**

## Abstract

The purpose of this study was to examine the pre-enrollment considerations of undergraduate wheelchair users (i.e., the decision to attend college, college selection factors) and their post-enrollment transitions (i.e., adjustments from high school to college, academic and social integration). Qualitative ethnographic research methodology was used to reveal the voices of 10 students using wheelchairs and four of their parents. The determining factors in the college selection process for students using wheelchairs were the academic majors available at the university, coupled with the physical accessibility of the campus and a strong office of disability services. The freedom that is attached to making personal decisions and friends was a new experience to many of them and, after a brief transitional time, they relished it. From being able to get around on their own to and from class, to hanging out with friends, a feeling of independence was the key to integrating into college. Similar to peers not in wheelchairs, these students had learned how to navigate the higher education setting and be vocal about their needs (i.e., self-advocate). A series of recommendations for students in wheelchairs, their parents, and colleges and universities is provided.

*Keywords:* Students with disabilities, disability services, wheelchair, transition, self-advocacy, qualitative

“This is a defining moment in people’s lives.”  
Sally, a university student and wheelchair user

The number of students with disabilities (SWDs) enrolled in postsecondary education who disclose a disability hovers around 11 percent, totaling 2,154,000 students in 2003 and 2,266,000 in 2008 (National Center for Educational Statistics, 2012). Seventy-six percent of colleges and universities reported having students with mobility limitations or orthopedic impairments on their campuses (Raue & Lewis, 2011). These students have unique and diverse needs. Although the physical environment at colleges may be changing, many barriers still exist in understanding SWDs and their needs (Bento, 1996). The intent of this study was to examine the pre-enrollment considerations of undergraduate wheelchair users and their post-enrollment transitions.

## Literature Review

The philosophical underpinnings for this study rest in the college enrollment and transition literature. Tinto's (1993) work on the reasons college students leave college and factors that can prevent student attrition were adapted from Van Gennep's (1909, 1960) studies on assimilation. Tinto created a three-stage progression for students to remain in college: separation from past communities, transition between high school and college, and incorporation into the college community. He also discussed the importance of academic and social integration and how these are associated with a student's involvement, retention, and persistence to graduation. Academic integration refers to the student's intellectual incorporation into the new academic system. Social integration takes place primarily through informal associations with other

college students and extracurricular college activities, including informal faculty interactions. The greater the student's level of social and academic integration, the greater the student's commitment to the institution and to persistence to graduation. Multiple researchers have discussed the utility of Tinto's model in predicting college student attrition (e.g., Cotton & Wilson, 2006; McKay & Estrella, 2008), whereas additional authors (e.g., Braxton, 2000, Braxton, Doyle, Hartley, Hirschy, Jones, & McLendon, 2014; Braxton, Hirschy, & McLendon, 2004) have questioned the empirical backing of the theory and reworked issues associated with student departure.

Schlossberg (1981, 1984, 1989) demonstrated that adaptation to life changes, or transition, is a complex process and adults in transition need to adjust and adapt to their new situations. Because students in college are engaged in a complex transition, it is important for universities and higher education practitioners to be aware of transition theory to best help students adapt to their new roles, relationships, and responsibilities. She defined transition as an event or nonevent which results in a change in assumptions about oneself, or the world, and noted that individuals must adapt to the new roles, relationships, and behaviors required by the transition. Schlossberg described three particular factors affecting an individual's transition process: characteristics of the individual, perception of the transition, and characteristics of the pre- and post-transition environments. Each of these three factors (e.g., age and life stage, socioeconomic status, health, and psychosocial competence among others) plays a role in impacting an individual's ability to adapt to the transition they are facing. The greater the difference in the pre- and post- environments, for instance, the more complex the transition becomes.

Tinto's and Schlossberg's theories have many implications for SWDs entering higher education, as they often experience a significant educational transition from high school to college. Only 60% of persons with disabilities enroll within eight years of leaving high school, as compared to 67% of adults in the general populations (Newman et al., 2011); 62% of individuals with orthopedic impairments were found to have ever enrolled in college. Since many higher education institutions were designed with able-bodied students in mind (Kottke, 1956), SWDs often require modification to the physical and academic environments. However, the greatest disadvantage may be the lack of social acceptance, as stigma related to having a disability is noted by some (Trammel & Hathaway, 2007) to be the more significant barrier to higher education success.

### The College Decision

As some SWDs struggle for "dignity, citizenship rights, and access to the marketplace" (Loewen & Pollard, 2010, p. 5), education is often a way for SWDs to level the playing field, a tool to gain recognition and respect (Paul, 1999), and a way to learn self-determination and self-management skills (Getzel & Thoma, 2008). Many persons with disabilities decide to go to college not only to increase their knowledge but also to develop their social skills and obtain good qualifications for future employment (Fuller, Healey, Bradley, & Hall, 2004).

The decision to attend college for SWDs is often more complex than for students who are able-bodied; it is not just simply a matter of finding a desired college, applying, and going. There are many other factors and barriers, such as independence and dealing with external pressures, that must be considered. Additional considerations such as parking, course selection, transportation, scheduling difficulties, fear, and faculty resistance can complicate the search process (Causton-Theoharis, Ashby, & DeClouette, 2009). Many high schools do not have specialists who assist SWDs with the college decision (Coleman, 1994). Parents may not know how to help their SWDs with the college decision (Janiga & Costenbader, 2002). The disability of the student cannot be ignored. SWDs need to consider factors such as major areas of study, size of the campus, demographics of the student population, extracurricular activities that are offered, and support services available (Coleman, 1994).

Some institutions are not considered by SWDs because of accessibility issues, thus options are reduced (Baron, Phillips, & Stalker, 1996; Hadjikakou, Polycarpou, & Hadjilia, 2010). Sometimes SWDs choose the only school that invited them for a tour (Jacklin, Robinson, O'Meara, & Harris, 2007). Like most students, those with disabilities used the Internet to search for colleges; however, many higher education web sites were not accessible. For example, Irwin and Gerke (2004) checked home pages, links to disability services, and search engines on the top 50 four-year colleges in the United States and found that, for blind or visually disabled students, only three schools' home pages passed accessibility guidelines, two had a disability link on the home page, and 10 schools did not even have contact information for disability services.

Wheelchair users indicated that choosing the right university was of high importance and one that created much anxiety (Paul, 1999). As would able-bodied students, these SWDs considered not only the institution's academic status and city location but also proximity to family, public transportation options, and

the safety of the city. Additionally, factors such as curbs, smoothness of streets, physical accessibility of buildings and classrooms, and other wheelchair travel issues were also considered. Most of these students based their decision on the extent of the school's disability services. Many large, public universities enrolled more SWDs because they had more available resources for SWDs (Sharpe & Johnson, 2001).

Parental involvement in the college decision also adds complexity to the process. Some SWDs attend college because of pressure from their parents and end up in programs they do not enjoy (Janiga & Costenbader, 2002). When SWDs attend college, it can be difficult on their families (Wilgosh, Sobsey, & Cey, 2008) because often, in addition to friends, parents are foremost in the student's support network (Paul, 1999). Parental over-protectedness, and the resulting degree of dependency, may hinder SWDs' decision to attend college (Enright, Conyers, & Szymanski, 1996). SWDs are often more fused to their families of origin than able-bodied students (Smith, Ray, Wetchler, & Milhail, 1998) and this may lead to maladjustment in higher education settings.

### **Transition to College**

The transition from high school to college can be difficult for SWDs (Barnard-Brak, Davis, Tate, & Sulak, 2009; Rothman, Maldonado, & Rothman, 2008) as social support systems change, contact with educators lessens, academics become more rigorous, and many emotional and physical changes occur (Enright et al., 1996). This difficulty may be amplified because every student with a disability has a unique set of circumstances (Wehman & Yasuda, 2005).

High school SWDs receive significantly different assistance as a result of the Individuals with Disabilities Education Improvement Act (2004) than SWDs in college receive, as a result of Section 504 of the Rehabilitation Act (1973) and the Americans with Disabilities Act (1990) as amended in 2008 (ADAAA, 2008). In higher education, SWDs must learn to advocate for themselves, a role that parents and others have previously filled in many cases. Although accessibility has improved greatly over the years, early planning is still necessary for college students who use wheelchairs (Clark, 2007). Such planning includes visiting classrooms beforehand to make sure that screens are visible, making sure bus schedules align with course meeting times, and determining if courses entail fieldwork in accessible areas.

The transition period for SWDs is vital for success (Jacklin et al., 2007). The inaugural semester or year of college is the most difficult for many students. An important part of the transition for SWDs is disclosing one's disability (Barnard-Brak, Lechtenberger, & Lan,

2010) and learning how to request accommodations. Research regarding the attitudes of SWDs requesting accommodations is in its infancy. Since many SWDs have little understanding of the accommodations available to them or effective ways to implement their rights after transitioning to college (Palmer & Roessler, 2000), many of them need assistance in negotiating this information. Training can enhance the ability of SWDs to self-advocate and become more competent in requesting accommodations.

"Nothing is more important to student retention than academic support, especially during the critical first year of college" (Tinto, 2012, p. 25). While academic support comes in many forms (e.g., summer bridge programs, first year seminars, supplemental instruction, learning communities), the success of many college students is somewhat determined by interactions they have with faculty members (Cook, Rumrill, & Tankersley, 2009). Faculty attitudes are even more important to students with disabilities (Barnard, Stevens, Siwatu, & Lan, 2008). By providing accommodations for SWDs, faculty members foster the development of these students and embrace diversity on their campuses.

A satisfactory college experience goes beyond academics (Paul, 1999). Many SWD do not become academically and socially integrated enough and fail to complete their education (Barnard-Brak et al., 2009). SWDs must have a life outside the classroom including things such as sports, jobs, hobbies, etc. (Clark, 2007). The more socially integrated SWDs feel, the longer they will remain in school (Enright et al., 1996). SWDs living on their own, managing a normal course load and their physical needs and finances, more readily blend in with the university community (Paul, 1999). The application of these skills is a precursor to success in larger society. Having practical experiences in college is important for future employment (Burgstahler & Bellman, 2009). Internships play a critical role for SWD as they may help to bridge the transition from classroom to career (Severance & Starr, 2011).

Self-determination is an important factor in SWDs success in college (Getzel & Thoma, 2008). Being told their goals were not possible to achieve made many SWDs more determined to succeed. Seeking services from the disability office and making smooth academic and social transitions were also important to their success. Barnard-Brak et al. (2009) suggested that research examining the factors that influence how SWDs select institutions of higher education was needed. Additionally, attitudes toward disclosing disabilities and requesting accommodations would be helpful as SWDs select colleges or universities to attend. Quali-

tative studies on personal care attendants and family members could also provide additional richness to our knowledge (Paul, 1999). This information would be helpful as disability service providers assist SWDs in successfully manipulating the college environment (Quick, Lehmann, & Deniston, 2003).

## **Method**

The purpose of this study was to examine the pre-enrollment considerations of undergraduate wheelchair users (i.e., the decision to attend college, college selection factors) and their post-enrollment transitions (i.e., adjustments from high school to college, academic and social integration). The study sought to answer the following research questions. How did undergraduate wheelchair users (1) arrive at the decision to attend college and decide which college to attend and (2) transition from high school to college and integrate into academic and social settings in college?

### **Design of Study**

Qualitative research methodology was chosen based upon the researchers' belief that the best way to understand college experiences was through questioning, understanding, and analyzing individual experiences, searching for common themes among these experiences, and comparing these experiences to Tinto's (1993) theoretical framework. The qualitative research method ethnography was used to reveal the student and parent voices. "Disability communities are ripe for ethnography investigation" (Couser, 2006, p. 123). Ethnographies focus on a group or subset of a group in order to "explore the beliefs, language, behaviors, and issues facing the group" (Creswell, 2013, p. 94). Understanding group dynamics from an analysis of the group allows the researchers to create a cultural portrait of the group with both etic (views of the researcher) and emic (views of the participants) views.

### **Data Collection**

Data were collected from 10 college students who used a wheelchair and the parents of four of these students, who were purposively sampled (Patton, 2002) from a public, four-year, doctoral granting institution in the Midwest with 20,000 students (17,000 undergraduates and 3,000 graduate students). The university focused on residential undergraduate education with emphases on the professions plus the arts and sciences (The Carnegie Foundation for the Advancement of Teaching, n.d.). External data in the form of transcribed interviews and internal data in the form of reflexive researcher field notes were subject to analysis.

Students were solicited through Disability Services at the university to participate in a 90- minute focus group. At the end of the focus group session, students were asked if they would consider participating in one-on-one interviews. All ten students agreed to participate. Students were also asked at the end of the focus group if a parent would be willing to be interviewed. Five students volunteered their parents. These parents were contacted and four agreed to be interviewed. Individual interviews with students and parents were conducted. Two semi-structured interview guides were constructed and used because they allowed participants to share stories and the researchers to follow-up with probing questions (Patton, 2002). The research questions served as the organizational framework for the protocols. The researchers were careful to ensure trustworthiness of the instruments. The initial student interview guide, constructed upon the research questions and literature, was field-tested during the focus group of college students who used wheelchairs. Then, a panel of experts (two disability educators and three faculty members skilled in qualitative methodology) collaboratively created the interview protocols for both students and parents based upon their professional work and research in the disability and higher education fields. Questions were modified and developed according to the study's primary research questions, informed by the theoretical framework. They were organized to address the decision to attend college, the college selection process, separation from home and transition to college, and integration into academic and social settings. Examples of the questions asked of students were: When did you realize that you wanted to go to college? What was the most significant factor in selecting a college? What were your biggest fears or concerns about going away for college? What has been your biggest issue or concern as you have transitioned into a college student? Do you feel you fit in? Did you ever doubt that you should be in college? How did you prepare yourself emotionally and academically to attend college?

Parents were asked not only about their pre- and post-transitional concerns for their students (e.g., how their transition concerns were different for their child in a wheelchair versus a child who does not use a wheelchair, when they realized their child would attend college, what their most important factors were in choosing a college with their child), but also what their emotions were in making those decisions, what their expectations and dreams for their children were in attending college, and their experiences of bringing their students to campus and moving them onto campus (e.g., what concerns did

you have about this child that were different from others, describe the process of making a decision to send your child to college, what were your expectations for your child attending college).

After approval by the Institutional Review Board, individual interviews were conducted, each lasting about one hour. They were digitally recorded and transcribed. The informants' personal information was kept confidential by usage of pseudonyms. During the interviews, the researchers adhered to the suggestion of Lofland and Lofland (1984) to write brief notes during the interview process to help in the creation of field notes. Field notes, according to Bogdan and Biklen (2007), are "the written account of what the researcher hears, sees, experiences, and thinks in the course of collecting and reflecting on the data" (p. 108). The researchers also utilized reflexivity by examining "the ways in which a researcher's involvement with a particular study influences, acts upon and informs such research" (Nightingale & Cromby, 1999, p. 228). One researcher's personal experiences, as the mother of a student in a wheelchair, informed the data collection process. All of these methodological techniques were used to increase reliability.

## **Data Analysis**

Data analysis was multifaceted and based on the open and axial coding techniques described by Strauss and Corbin (1998). This type of data analysis is iterative in nature and required the researchers to visit the data multiple times. Strauss and Corbin defined open coding as the "analytical process through which concepts are identified" or "discovered" in the data (p. 101). Axial coding is defined as the "process of relating categories" (p. 123). The goal of open coding is to open up the data to possible interpretations and the goal of axial coding is the "process of reassembling the data that were fractured during open coding" (p. 124). Thematic categories are produced through the process of inductive, open, axial coding of data, the interpretation of the data, the researcher's expertise and experiences, the researcher's analytical memos and field notes, and the literature regarding the topic. The researchers utilized the constant comparative analysis method (Glaser & Strauss, 1967) to develop each level of coding and final thematic categories to reveal how participants integrated academically and socially to college. In evaluating the credibility, dependability, and confirmability of the study, the researchers adhered to the recommendations of Lincoln and Guba (1985) for qualitative research studies.

Three cycles of coding were employed by the researchers in this rigorous analysis of both the student

and parent interviews. The same three qualitative cycles and process of coding were employed with both the student and parent data sets; each data set was coded separately. "A code in qualitative inquiry is most often a word or short phrase that symbolically assigns a summative, salient, essence-capturing, and/or evocative attribute for a portion of language-based or visual data" (Saldana, 2012, p. 3). At the first level of coding, the data were culled and each time a student or parent spoke, that exchange was holistically or "lump coded" using the participant's language or actual words. During the second level of coding, the codes were split and the participant's words were used; this is referred to as "In Vivo coding." "In Vivo coding is particularly useful in education ethnographies" and with marginalized cultures because it allows the researcher to broaden the reader's perspective of the "cultures and world views" (p. 74) of the young adults being studied. At the third and final level of coding, pattern or focused coding was used to categorize or organize the data.

After open and axial coding at three different levels was completed, and the researchers were able to see the commonalities among themes, the scope of the findings was narrowed down to exemplar themes (Hopper, 1988) that answered the research questions. During the lump and In Vivo coding, first and second level of analysis, key phrases and comments repeated several times by the participants were discovered, so note was made of this in a perpetual fashion while collecting and analyzing the data. To induce the data as the researchers moved through level three of the coding process, the data were moved through differentiating between the chaff, "that data which is determined to be non-significant or redundant" and the wheat, "that data which is deemed significant or exemplary" (Chenail, 1995, para. 14). Once the repeating themes, or "wheat," were identified, the researchers allowed the data to be the "star" in terms reporting exactly which themes were revealed in understanding the pre-enrollment considerations of wheelchair users and their post-enrollment transitions.

## **Findings**

The findings begin with a discussion of the participants' attributes related to their backgrounds as college students using wheelchairs. Then the decision to attend college and the college choice process are presented, followed by transitional issues these students faced when moving from home and high school to college. Finally, findings related to students' academic and social integration patterns are presented.

### Attributes

The study encompassed a diverse sampling of students in terms of gender, course of study, reasons why a wheelchair was used, and ethnicity. Four of the SWDs were female and six were male. As is representative for students who attend the university, the majority were in-state students. They lived no farther than a three-hour drive from the university, but none were from the local area. The majority of the students were Caucasian, but one was African-American, one was of Hispanic heritage, and one was of a Middle-eastern ethnicity. The students also had multiple reasons for wheelchair use; some had used wheelchairs all of their lives, while others had not. Reasons for wheelchair usage included Osteogenesis Imperfecta, Muscular Dystrophy, Spina Bifida, Cerebral Palsy, Congenital Spastic Quadriplegia, Friedreich's Ataxia, and a Spinal Cord Injury.

Participants' courses of studies also varied, including journalism, pre-medical studies, telecommunications, speech and language pathology, English, theatre, computer science, and political science. The students chose their courses of study for different reasons, some because of interests generated in their high school courses of study or because family members were professionals in a particular field. Some were inspired by people they encountered working in those fields. For example, one student decided to pursue pre-medical studies because of his own time spent within the medical community. Another student had an aunt who worked as a speech therapist. The student had observed her and realized that was what she wanted to practice. As often happens, a few students changed their majors once enrolled at the university and encountered a larger glimpse of options and of the world of work.

The parent participants consisted of one male and three females. Three of the parents had other children besides the ones we interviewed. All parents interviewed were the primary caregivers of the students in this study.

### The Decision to Attend College

Overwhelmingly the students asserted, and their parents confirmed, that they had always known they would attend college. It was an expectation the students and their parents had always set. The fact that the students used wheelchairs was never a part of the equation in making the decision about whether or not to attend college. Jerry said, "My parents assumed that I was going to go to college. I can't imagine a scenario in which I did not go to college." It never occurred to many of the students that they had the option not to attend college. Sally summed up the other participants well with, "There really wasn't any sort of talk about

me not going to college. I want all the support and resources at my disposal that I can possibly have. And having a higher education is going to give me those." Aiden explained that he waited until he was in high school to consider attending college.

Starting my sophomore year I realized it was something that I wanted to do because coming to a university would be a great way to obviously find out what you want wanted to do with the rest of your life. Education is really important.

When parents were asked about the college decision process, both if and when their child would attend college, their responses mirrored their student's answers. Carrie said of her son, Michael:

When he was born, he didn't have a choice. College was a given. That's how it is with my kids – you're going. He has to get a good education so he knows an undergrad [degree] is probably not going to be enough.

A father further illustrated that it did not matter if his son was in a wheelchair or not because "he's from a high achiever family. We always expected our kids to go to college. Going to college is just a normal part of life for this family." Only one parent expressed initial concern by divulging,

When Daisy was diagnosed [at 10 months old], there were three things that went through my mind. One was, "Will she go to college?" One was, "Will she ever date?" And the third one was, "Oh my gosh, what would happen if there were a fire?"

She then went on to share how she immediately went home and began researching how to address those three concerns and discovered the university Daisy now attends. It was the only university she found that talked about accessibility openly on their website. So, she started talking to her daughter about college at 10 months old. She decided she would go because it was possible.

Only one student had a different answer. His parents did not think he could go to college, but the "teaching assistants became my friends and they told me, 'You know, you could go to college and then all this difficult home life you have would change.'" His ideas were denounced by his family, but he finally was able to attend by pressing the issue and repeatedly posing the following questions: "What happens when you guys all pass away and what am I going to do then? Where am I going to get that care?"

### The College Selection Process

Two major factors influenced students' and parents' decisions to choose the college of their choice: accessibility and choice of major. Danny and Lois (respectively) said, "It's a combination of the accessibility and my major because I want to be a sports broadcaster," and "because it's accessible and the special education department." Eighty-seven percent of the students who attend the university where this study was conducted are in-state residents. Sally reflected this trend by saying, "I live in [name of state]. I'm interested in journalism. I'm a student with a disability." However, it is important to note that students did visit other universities both in and outside of the state. Some were advised that they should attend a different university because of what the individual students wanted to study, but accessibility trumped that decision.

For example, Michael, a pre-med major, was advised to attend another university because of that institution's better pre-med programming. He explained, however, "I went there for a visit and it was just a nightmare to get around. I chose accessibility over what was academically advised." Danny shared that he really wanted to attend another university but his family insisted they at least do a campus tour of the school he eventually attended. During their tour, he and his family were left behind because he could not access a building. The guide said he would return but did not; after waiting for an hour, Danny and his family left. He agreed with his parents that the university was too large and difficult to navigate. Jerry concurred when explaining his experience of visiting another university. He said, "If I can't move around the campus, it doesn't really matter how good the school is because I can't get anywhere. Accessibility has to be priority one." Mary, colloquially and with a matter-of-fact attitude, explained that because of her academic major, her choices were limited because the university of her first choice "sucks at accessibility. I didn't want to spend all my time commuting to class."

Disability services was another factor in the college selection process and included references to wide availability of automated doors on buildings and on individual residence hall rooms, special housing for wheelchair users, a community where wheelchair users were visible and prevalent, one-on-one faculty mentorships, a student support group, local accessible transportation, and the director of disability services on campus. Aiden offered that, while the university may not have been his first choice, the appearance of the campus, accessibility of sidewalks and wheelchair ramps, and the student-friendly disability office changed his mind. Daisy endorsed this idea by saying,

What sold me was we went to [the disability service] office and my mom brought this huge accordion folder with everything we could possibly need. And [name] took one look at me and at the papers just to verify everything and he's like, "Anything you want, you will get." And I did!

Parents expressed the same ideas concerning the college choice. "The most important one? [Name of disability service director]. Second was knowing that there was full support for people in chairs."

Half of the participants expressed that being able to have a single room with an accessible single bath was a critical factor since many have health aides who come in to assist them with bathing and bedtime routines. Peggy shared that her biggest fears were "the dorm room and an accessible bathroom" and those were "non-issues at [institution name]." Several students expressed that the entire disability office served as both a source of support and reason for growth because they needed to learn to self-advocate, which was not necessarily something they experienced in their secondary school environment. One student, Jake, was having a problem with an instructor making accommodations. He sought help from the DS director the week before classes were out. The director helped him understand that he should have previously sought out help. Also, having access to a disability services supported shuttle on campus was critical. As Jake shared,

I was telling some of my friends who went to [university name] about the disability shuttle that will take students anywhere they need to go on campus. They don't have a shuttle at [university name]; it's not a knock against them but again, if I can't move around the campus, it doesn't really matter how good the school is because I can't get anywhere.

### The Transition from High School to College

Transitions can be positive or negative experiences and, for the college student, there are a myriad of concerns. Along with the typical issues most college students face, such as the fear of failing the first semester and having to take certain subjects again, SWDs have the additional concerns of attendant care and personal care needs. However, transitions can also be favorable. SWDs enjoyed their greater independence in college despite the stress of time management that accompanied this new degree of autonomy. Jerry was concerned about college because he "didn't want to deal with math and science," which had "nothing to do with the chair." Some students were worried that

not being successful in the first semester would mean "failing at life." Sam tried to be more "social instead of being more scholarly," which led to academic problems. Sally thought she was prepared to manage her time but still struggled with balancing all of the work.

Besides time management, attendant care represented the most difficult part of transition for these students. To take care of their personal needs, some students used companies that provided personal attendants, some employed their friends, and others did everything for themselves. Problems included finding an agency, finding attendants to accommodate students' schedules, and attendants being absent or tardy. Sam had attendants who on occasion would not show up or who were consistently late. Since he preferred to be non-confrontational, some of the attendants took advantage of him. Eventually, he ended up paying his friends to help him. Jerry said that there is "an adjustment period to get used to the idea that these people were coming in to take care of me and that they are not Mom and Dad." Lois has struggled with finding attendants who worked with her schedule. She missed classes because attendants did not arrive on time. She often had to lie in bed when she was not tired and others were outside of her door socializing because it was the only time an attendant could come to help her into bed.

Although time management was a struggle, college schedules did allow for a newfound independence for these students. Students talked about getting to do what they wanted and having control over where and when they went. Danny agreed that the independence was good but, as he had "always relied on other people to get me where I needed to go," transportation was a concern for him. For Sam, the independence was life changing. "It's like, me being my own person and going on my schedule instead of somebody else's."

While the participants cherished their independence, their parents struggled with it. When Peggy left her daughter at college she did not cry until the ride home because she did not want to be emotional in front of her. She did not like the fact that, as a mom, she lacked the ability to help if things went wrong. However, she realized that after being the person who took care of her daughter's problems her whole life, it was time for her daughter to "be the adult." That change was a big adjustment for them both.

Karolyn's big realization came on her daughter's move-in day. She went to the desk and told them that she was moving her daughter into the residence hall. She was taken aback when she was informed that the student, not the parent, had to check in. "I kind of looked at them and said: Wow, wait a minute. I'm the mother." She laughed as she continued, "and that was

one of the best things that they could ever do because it was breaking me of being the person in charge... of Daisy's life. Daisy was now in charge of Daisy's life." She was happy for her but "cried the whole way" home. Carrie also talked about giving her son as much freedom as he needed and "a lot of times that means keeping my mouth shut." She says he does not call or email as much as she would like, but it is his life now. In contrast, another parent commented that his son needed to be more independent because he came home "too often." Most of the parents were excited, but understandably nervous and worried, about their child leaving and living independently. Like their students, they worried about attendant care such as dressing, showering, and toileting assistance, and accessibility and transportation in bad weather. And while the above parent was also concerned about these issues, he explained that his son was too dependent on the family. He added that he was looking forward to spending time with his other children and hoping that his son would learn to be independent so he could manage the future on his own. He went on to explain, "When you've got a kid with handicap like that in the family, everyone has to make sacrifices." It is important to note that this was the only father interviewed. The mothers also wanted their children to be independent and successful, but noted fear and loss while describing their child leaving. The new realization that they no longer had to be the primary caregiver was a source of grief for some of them. Cindy remarked that, on the drive home from taking their son to college, everyone in the family cried. She recalled, "Everybody [in the family] worked together and then, all of a sudden, he wasn't with us."

### **Academic and Social Integration**

Personal independence affected students' academic performance and social integration. As with any group of university students, some of these students felt singled out while others felt that they fit in perfectly. All of them were happy with their feelings of independence and the social atmosphere that college afforded them. From being able to get around on their own to and from class, to socializing with friends, a feeling of independence was the key to integrating into college.

In high school, Daisy would eat in the library because she did not have friends to eat with; Lois did not have friends either and hung out with her parents. Sam was accompanied by aides throughout the day and other students would not interact with him. Michael thought high school revolved around sports and most school activities were useless to him since he was in a wheelchair. However, in college, these students had

adapted well socially. Students noted that in their elementary and secondary school settings, they spent more time with adults (e.g., teachers, attendants, instructional aides, therapists) than they did with other students. So working with the staff in Disability Services, the attendant care staff, and the faculty members were not difficult transitions. Since there were many students in wheelchairs in their classes and residence halls, for the first time in their lives, they were not the only wheelchair user at the school. Additionally, they had the freedom to go anywhere on campus. Lois shared that, besides school and doctor's offices, she had never taken her wheelchair out of her cul de sac in her neighborhood. Michael expressed this excitement well by saying, "There's so much stuff to do, and you can do basically whatever you want."

Although there was a residence hall at this university that specifically catered to students in wheelchairs, not all students opted to live there. Lois was an honors student and wanted to live with her peers in another hall. She did not like the stereotype of living in the hall specifically retrofitted for students in wheelchairs because that would stifle her experience. Academically, all of them shared that because they had always wanted to go to college, they were determined to make that goal a reality. And because the accessibility of the university (including housing and transportation) was better equipped to handle students' needs than their former secondary settings, a student support group, and academic supports such as notetakers and assistive technology, students could thrive and focus more on their social integration.

All of the parents hoped that their children would make friends and get good grades in college. When asked what her expectations were for Michael, Carrie said, "I expect him to do well and I expect him to work hard." She added that she "hopes he has fun in the process and makes friends and kind of spreads his wings and just gets an incredible life experience out of it." Sally's mom wanted her to get her degree and have "the ability to support herself." Jerry's father cared more about the social aspect of college than grades. "He has no social skills with peers." He commented that college was not about the wheelchair, but about Jerry. He wanted Jerry to have an experience similar to other college students, but Jerry had resisted and goes "back to his room and stays by himself and doesn't talk to anyone. So our expectation now is that he just graduate." Sally's mom also wants her daughter to get her degree but added, gaining "the ability to support herself" was important. Daisy's mom wanted her daughter to have "four years of independence" and "a great college experience and meet new friends." As

she continued she started crying. "I think four years because I really thought after four years I didn't know what the world was going to hold for Daisy." She now realizes that college did more for her than educate her; it let her "grow as an adult and that is everything a parent could hope for."

## **Discussion**

The discussion is presented as a response to the two research questions. Then a set of recommendations for student wheelchair users and their parents, disability educators in higher education, and college and university policy makers are provided. These are followed by limitations and a conclusion.

### **The College Decision**

The first research question asked how did undergraduate wheelchair users arrive at the decision to attend college and decide which college to attend. Tinto (1993) reported that pre-entry attributes including family background, individual characteristics, and K-12 schooling influenced undergraduates' college decisions. That was confirmed with the population of undergraduate wheelchair users in this study as they considered and made decisions to obtain their personal goals of seeking a university education. It was also evident during the decision-making process regarding which college or university to attend. These results supported data from previous authors (Fuller et al., 2004; Getzel & Thoma, 2008; Paul, 1999) regarding expectations that students and their parents had regarding attending college. Using a wheelchair did not limit the expectation or motivation for a student to meet the personal goal of obtaining a higher education.

However, the decision for a student in a wheelchair to attend college is more complex because of the disability (Causton-Theoharis et al., 2009; Hadjikakou et al., 2010; Janiga & Costenbader, 2002; Schlossberg, 1981, 1984, 1989). Students and parents expressed concern about the availability of services to enable the student to be successful. This concern was often due to the students' K-12 educational settings where they had received services, including accommodations and modifications, in order to access and fully participate in the physical and academic environments. Regardless of the concerns and complexity, the parental expectation that students would attend college and the potential academic major drove the decision to visit and consider attending different college and universities. Students' ultimate choice of college to attend, supported by their parents' agreement, was influenced by three factors: the academic majors available at the university, the

physical accessibility of the campus, and a strong office of disability services.

Students in wheelchairs had many of the same concerns as peers who do not use wheelchairs. While able-bodied undergraduates would not need to consider physical accessibility and may not need to work with disability services, they would consider the choice of academic majors, availability of student housing, student work options, and extra-curricular opportunities (Paul, 1999). Students in this study discussed the availability of academic majors and amenities such as housing options that were fully accessible for students in wheelchairs (e.g., roll in showers, automatic door openers, and recreational sport opportunities).

### **Transition to College**

The second research question asked how undergraduate wheelchair users dealt with the transition from high school to college and how they academically and socially integrated into the collegiate culture. This transition is difficult for many adult students (Schlossberg, 1981) but is often more difficult for SWDs (Barnard-Brak et al., 2009; Rothman 2008) as they have to learn to advocate for themselves, both academically with faculty and socially with friends. The results of this study showed that college students in wheelchairs were able to self-advocate well (Barnard-Brak et al., 2007) when presented with this challenge. However, parents had more trouble with the transition and often experienced difficulty letting go. For example, Daisy's mother was reminded that it was the students' responsibility to check-in to the hall, not the parents'. Many parents had to keep themselves from calling and visiting too often. Michael's mother explained that, prior to her son attending college, "everything revolved around making things okay for him." But then, "all of a sudden he wasn't with us." Giving up the caretaker role is difficult. Most of the students relished the independence; their parents thought that they did not call enough. Many of the issues that confront parents of students in wheelchairs are the same issues as parents of students who are not in wheelchairs.

The freedom that is attached to making personal decisions and making friends was a new experience for most of the college students in wheelchairs. Yet, after a brief transitional time, they relished it (Paul, 1999). For example, Daisy cried a lot the first year of college but now considers her friends at school "family." She claimed to have not known what friendship was until college. Many of the students in this study explained that in the K-12 setting, because of the nature of the care they required or limitations with transportation or school facilities, their parents or school assistants

or teachers were often their only social outlets. Daisy was so engaged socially during her first year that she thought she would "flunk out" of all her classes. However, she learned how to successfully balance and integrate both academics and social life. Enright et al. (1996) reported that SWDs will experience various academic and social transitions, and the more they can cope with these transitions and especially become socially integrated, the more likely they will persist to graduation. Laura shared that unless her parents or the school transported her, the only places she could go to by herself was in her neighborhood or the hallways of her school. At the university, she could join friends to go out to eat or to events without having to necessarily be transported. Similar to peers not in wheelchairs, this study's participants had learned how to navigate the higher education setting.

Students in wheelchairs need to learn how to be vocal about their needs, the process of becoming a self-advocate (Barnard-Brak, Sulak, Tate, & Lechtenberger, D., 2010; Palmer & Roesler, 2000). For example, Sam explained that "it takes time...my first year was bad. And then, second year it got better. And then third year it got better. And then now, it's pretty good." He had some trouble adjusting academically the first year but only because he became too socially integrated. Although the first year of college is the most difficult in the transition from high school to college, students are offered services such as summer bridge programs, orientation sessions specifically for students with disabilities, and direct access to faculty members through a faculty mentorship program. Students often fail to take advantage of these services. This is especially true for students with disabilities, some of whom may be trying to reinvent themselves by avoiding any contact with other students with disabilities or college staff members who may have roles similar to high school personnel who had assisted them in the past.

However, student in wheelchairs should be encouraged to seek out these services, especially from the office of disability services, to help create a smooth academic and social transition (Quick et al., 2003). Having a competent, student-focused staff in disabilities services offices is helpful but they must refrain from being too intrusive in order to promote students' emerging self-determination (Getzel & Thoma, 2008). For example, Sally explained this by saying, "Be ready for us to ask. Let us get to the point where we know what we need, and then help us. Don't help us to death." How these students with wheelchairs used the disability office varied. For example, Sam only used the office when he needed it as "a last resort," while Michael explained that in high school "everything felt

cobbled together. With [name of disability office director], nothing felt cobbled together." Aiden had troubles with his attendant care. He nervously approached staff in the disability office about this and they helped him solve the problem. During Daisy's first year, she was scared and wanted to go home. She went to the disability office and the director helped her. "He works magic," she recalled. Competent and student-centered staff in a office of disability services can make the transition process unfold in a more effective manner.

## **Recommendations**

Building upon the conversations the research team had with participants and their parents, several best practice recommendations regarding successful transitions from high school to college for students using wheelchairs can be identified. They are provided here as part of the discussion. These recommendations stem from participants' experiences and are supported by the literature.

### **For students in wheelchairs and their parents.**

Visit multiple colleges, beginning as early as the sophomore or junior year of high school (Clark, 2007). While time on these campuses may cause some anxiety (Paul, 1999), it will serve students and parents well (Wilgosh et al., 2008). Although these visits typically can be arranged through the college's admissions office, make sure that a meeting with the disability services office is planned during the visit. Inquire with the disability services staff as to how many students using wheelchairs attend the college. Tour a residence hall to learn of accessibility features for students using wheelchairs. Inquire as to which residence halls are accessible for students using wheelchairs and ask how many of these students live in the residence halls. Many buildings, such as residence halls, may appear to be accessible and staff may claim that they meet relevant codes; however, it will be helpful to know other students' experiences living there. To determine the college's commitment to the academic and social integration of these students (Tinto, 1993), ask disability services staff members to share data regarding retention and graduation rates for students with disabilities at the institution.

An important consideration in the transition to college for some students who use wheelchairs is the provision of attendant care. Because of the complexity that attendant care brings to some new college students, it may influence their ability to adapt to the transition they are facing (Schlossberg, 1981, 1984, 1989). Ask the university to provide information as to how other students in wheelchairs have managed their care and what resources the college can provide to assist with this process if needed.

Ask if staff in the disability services office can arrange to connect potential students with current students at the college who are wheelchair users. Staff members in the office of disability services can provide important information about the institution. The vantage point of a student with a similar disability who has transitioned into the cultural settings of the campus (Tinto 1993), however, will give valuable insight as to the strengths and weaknesses of that college's approach to assisting students with disabilities during what has the potential for being a difficult transition (Barnard-Brak et al., 2009).

**For colleges and universities.** Because the college decision is more complex for SWDs (Causton-Theoharis et al., 2009), and some parents may not know how to help SWDs in the college decision (Janiga & Costenbader, 2002), provide regular training for admissions staff members on access to college and accessibility issues regarding students using wheelchairs. Admissions tour guides need to know the accessibility features of the buildings they will show prospective students and their families. Students participating in this study indicated that some staff members did not seem prepared to assist students using wheelchairs at some of the universities they visited, which they then chose not to attend.

Having a well-developed disability services office with competent professional staff assisted students in this study and other staff members overcome some of the participants' academic and social barriers (Tinto, 1993). Disability services staff facilitate change and advocate for social justice for SWDs, helping them be successful college students (Loewen & Pollard, 2010). Students, parents, and staff members in various departments need to be familiar with the disability services office and know they can contact the office for assistance, suggestions, and resources. Empower a disability services staff that is experienced and comfortable in helping students who are wheelchair users transition into college (Schlossberg, 1981, 1984, 1989), develop self-management skills (Getzel & Thoma, 2008), and obtain skills for future employment (Fuller et al., 2004). Staff members in the disability services office should be able to teach students with disabilities how to self-advocate but the staff should also, as necessary, be willing to advocate for students. These related responsibilities empower disability services professionals to address the fundamental goals of promoting equitable and usable postsecondary environments for persons with disabilities (Association of Higher Education and Disability, 2004-2014).

Provide multiple ways for students in wheelchairs to become socially integrated (Barnard-Brak et al., 2009; Tinto, 1993). Coming to a campus that has a

community of students using wheelchairs was important to the participants of this study. While some students indicated that they were impressed with the disability-specific programs the college offered (including a power soccer team and a student group focusing on disability issues), other students liked that they were welcomed into co-curricular clubs and organizations available to all students. Students need lives outside of the classroom (Clark, 2007). Disability services educators can work with SWDs to develop programs and routine events that raise the consciousness of college/university resources and empower students to use their voices for social integration throughout the campus (Cory, White, & Stuckey, 2010).

Provide opportunities for students in wheelchairs to integrate into the academic culture (Tinto, 1993), preferably directly through interactions with faculty members (Cook et al., 2009). This provides opportunity for social justice and equality for SWDs (Loewen & Pollard, 2010). At the institution where this study took place, a mentoring program exists where new students with disabilities are paired with faculty members in the student's academic major (Patrick & Wessel, 2013). These faculty members mentor SWDs to navigate the many transitions during the first year of college, including how to disclose disabilities (Barnard-Brak et al., 2010).

Provide accessible housing options for students using wheelchairs. Many participants appreciated having a residence hall where several students using wheelchair lived, possibly because of the perception of higher likelihood of social acceptance (Trammel & Hathaway, 2007). Other participants chose not to live with those with similar disabilities. Accessibility features offered in various residence halls at the university should include push button openers, proximity card readers (instead of keys), single rooms or suite arrangements, with just a few rooms sharing restroom facilities, and restrooms that offer roll-in showers and adapted toilets. It is also helpful for students to be allowed to move in early to have time to make any necessary adaptations to their living space and to learn to navigate campus before other students arrive.

The disability services staff and/or housing personnel need to provide information to students regarding attendant care, which for many students will be a defining transitional process (Schlossberg, 1981, 1984, 1989). Most postsecondary institutions do not offer personal care to students; however, the college should provide detailed information as to where students can arrange for care. A listing of local home health care agencies or fellow students interested in serving as attendants should be provided to new students needing attendant care.

## **Limitations**

The results of this study were limited to the experiences of undergraduate students who used a wheelchair and some of their parents, while enrolled at a doctoral-granting, public, midsized, Midwestern university. The study did not seek out students from private colleges or universities or from other geographical areas. The experiences of these students and parents were self-reported. Future studies could explore training needs for disability services staff when helping students in wheelchairs make the transition to higher education and transitions of parents as their college students in wheelchairs begin to exercise their independence. This study could be contrasted with future research about college students who use wheelchairs whose transition experiences were less positive, to further understand how Tinto's and Schlossberg's theories predict negative as well as positive cases. It may also be useful to more fully understand attendant care and how that unfolds for new college students and influences their undergraduate experience.

## **Conclusion**

The intent of this study was to examine the pre-enrollment considerations of undergraduate wheelchair users and their post-enrollment transitions. The college decision process is similar to peers not using wheelchairs. But the decision for a student using a wheelchair to attend college is more complex because of the disability. In addition to the parental expectation that students would attend college, the determining factors of students in this study about their college choice were the academic majors available at the university, the physical accessibility of the campus, and a strong office of disability services.

The results in this study showed that college students using wheelchairs learned how to advocate well for themselves. This transition component is difficult for some students in wheelchairs. The freedom that is attached to making personal decisions and making friends was a new experience for many of the participants in this study and, after a brief transitional time, they relished it. From being able to get to and from class on their own, to hanging out with friends, a feeling of independence was the key to integrating into college. Just as do other students, these students had learned how to navigate the higher education setting and self-advocate for their needs.

Students in wheelchairs should be encouraged to seek out available resources on campus, especially from disability services offices, to help create a seamless academic and social transition. Competent and student-centered staff in a disability services office can make the

transition process smoother. In all of our conversations with students and parents, the researchers felt that Aiden summed up the college selection and transition process well when he said, “We’re all the same. We just want to find something we want to do for the rest of our lives.”

## References

- Americans with Disabilities Act of 1990, 42 U.S.C. § 12101 et seq.
- Barnard, L., Stevens, T., Siwatu, K., & Lan, W. (2008). Diversity beliefs as a mediator to faculty attitudes toward students with disabilities. *Journal of Diversity in Higher Education*, 1, 169-175. doi:10.1037/a0012707
- Barnard-Brak, L., Davis, T., Tate, A., & Sulak, T. (2009). Attitudes as a predictor of college students requesting accommodations. *Journal of Vocational Rehabilitation*, 31, 189-198.
- Barnard-Brak, L., Lechtenberger, D., & Lan, W. Y. (2010). Accommodation strategies of college students with disabilities. *Qualitative Report*, 15, 411-429.
- Barnard-Brak, L., Sulak, T., Tate, A., & Lechtenberger, D. (2010). Measuring college students' attitudes toward requesting accommodations: A national multi-institutional study. *Assessment for Effective Intervention*, 35, 141-147. doi:10.1177/1534508409358900
- Baron, S., Phillips, R., & Stalker, K. (1996). Barriers to training for disabled social work students. *Disability and Society*, 11, 361-377.
- Bento, R. F. (1996). Faculty decision-making about 'reasonable accommodations' for disabled college students: Information, ethical and attitudinal issues. *College Student Journal*, 30, 494-501.
- Bogdan, R. C., & Biklen, S. K. (2007) *Qualitative research for education: An introduction to theories and methods* (5th ed.). Boston, MA: Pearson Education.
- Braxton, J. M. (Ed.). (2000). *Reworking the student departure puzzle*. Nashville, TN: Vanderbilt University Press.
- Burgstahler, S., & Bellman, S. (2009). Differences in perceived benefits of internships for subgroups of students with disabilities. *Journal of Vocational Rehabilitation*, 31, 155-165.
- Causton-Theoharis, J., Ashby, C., & DeClouette, N. (2009). Relentless optimism: Inclusive postsecondary opportunities for students with significant disabilities. *Journal of Postsecondary Education and Disability*, 22, 88-105.
- Chenail, R. J. (1995). Presenting qualitative data. *The Qualitative Report*, 2(3). Retrieved from <http://nova.edu/ssss/QR/QR2-3/presenting.html>
- Clark, G. (2007). Going beyond our limits: Issues for able and disabled students. *Journal of Geography in Higher Education*, 31, 211-218.
- Coleman, M. R. (1994). Post-secondary education decisions for gifted/learning disabled students. *The Journal of Secondary Gifted Education*, 5(3), 53-59.
- Cook, L., Rumrill, P. D., & Tankersley, M. (2009). Priorities and understanding of faculty members regarding college students with disabilities. *International Journal of Teaching and Learning in Higher Education*, 21, 84-96.
- Cotton, S. R., & Wilson, B. (2006). Student-faculty interactions: Dynamics and determinants. *Higher Education*, 51, 487-519. doi:10.1007/s10734-004-1705-4
- Couser, T. (2005). Disability and (auto)ethnography. *Journal of Contemporary Ethnography*, 34, 121-142. doi:10.1177/0891241604272089
- Creswell, J. W. (2013). *Qualitative inquiry and research design: Choosing among the five approaches*. Thousand Oaks, CA: Sage.
- Enright, M., Conyers, L. M., & Szymanski, E. (1996). Career and career-related educational concerns of college students with disabilities. *Journal of Counseling & Development*, 75, 103-114. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=1997-02426-003&site=ehost-live>
- Fuller, M., Healey, M., Bradley, A., & Hall, T. (2004). Barriers to learning: A systematic study of the experience of disabled students in one university. *Studies in Higher Education*, 29, 303-318.
- Getzel, E., & Thoma, C. (2008). Experiences of college students with disabilities and the importance of self-determination in higher education settings. *Career Development for Exceptional Individuals*, 31(2), 77-84.
- Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Chicago: Aldine.
- Hadjikakou, K., Polycarpou, V., & Hadjilia, A. (2010). The experiences of students with mobility disabilities in Cypriot higher education institutions: Listening to their voices. *International Journal of Disability, Development and Education*, 57, 403-426.
- Hopper, R. (1988). Speech, for instance: The exemplar in studies of conversation. *Journal of Language and Social Psychology*, 7, 47-63.

- Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. § 1400 et seq.
- Irwin, M. M., & Gerke, J. D. (2004). Web-based information and prospective students with disabilities: A study of liberal arts colleges. *EDUCAUSE Quarterly*, 27(4), 51-59.
- Jacklin, A., Robinson, C., O'Meara, L., & Harris, A. (2007). *Improving the experiences of disabled students in higher education*. Retrieved from <http://www.heacademy.ac.uk/assets/York/documents/ourwork/research/jacklin.pdf>
- Janiga, S. J., & Costenbader, V. (2002). The transition from high school to postsecondary education for students with learning disabilities: A survey of college service coordinators. *Journal of Learning Disabilities*, 35, 462-468.
- Kottke, F. (1956). College education for the handicapped student. *The Journal-Lancet*, 76, 391-394.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park, CA: Sage.
- Lofland, J., & Lofland, L. H. (1984). *Analyzing social settings: A guide to qualitative observation analysis*. Belmont, CA: Wadsworth.
- McKay, V. C., & Estrella, J. (2008). First-generation student success: The role of faculty interaction in service learning courses. *Communication Education*, 57, 356-372.
- National Center for Education Statistics. (2012). *Digest of educational statistics: 2011*. Washington, DC: U.S. Department of Education, Institute of Education Sciences. Retrieved from <http://nces.ed.gov/programs/digest/d11/>
- Newman, L., Wagner, M., Knokey, A.-M., Marder, C., Nagle, K., Shaver, D., Wei, X., with Cameto, R., Contreras, E., Ferguson, K., Greene, S., & Schwarting, M. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school: A report from the National Longitudinal Transition Study-2 (NLTS2)* (NCESR 2011-3005). Menlo Park, CA: SRI International.
- Nightingale, D., & Cromby, J. (Eds.). (1999). *Social constructionist psychology: A critical analysis of theory and practice*. Philadelphia, PA: Open University Press.
- Palmer, C., & Roessler, R. T. (2000). Requesting classroom accommodations: Self-advocacy and conflict resolution training for college students with disabilities. *Journal of Rehabilitation*, 66(3), 38-43.
- Patton, M. Q. (2002). *Qualitative research and evaluation methods* (3rd ed.). Newbury Park, CA: Sage.
- Paul, S. (1999). Students with disabilities in post-secondary education: The perspectives of wheelchair users. *Occupational Therapy International*, 6, 90-109. doi:10.1002/oti.91
- Quick, D., Lehmann, J., & Deniston, T. (2003). Opening doors for students with disabilities on community college campuses: What have we learned? What do we still need to know? *Community College Journal of Research & Practice*, 27, 815-827. doi:10.1080/10668920390220390
- Raue, K., & Lewis, L. (2011). *Students with disabilities at degree-granting postsecondary institutions* (NCES 2011-018). U.S. Department of Education, National Center for Education Statistics. Washington, DC: U.S. Government Printing Office.
- Rothman, T., Maldonado, J. M., & Rothman, H. (2008). Building self-confidence and future career success through a pre-college transition program for individuals with disabilities. *Journal of Vocational Rehabilitation*, 28, 73-83.
- Schlossberg, N. K. (1981). A model for analyzing human adaptation to transition. *The Counseling Psychologist*, 9(2), 2-18. doi:10.1177/001100008100900202
- Schlossberg, N. K. (1984). *Counseling adults in transition: Linking practice with theory*. New York: Spring Publishing..
- Schlossberg, N. K. (1989). *Improving higher education environments for adults: Responsive programs and services from entry to departure*. San Francisco: Jossey-Bass.
- Section 504 of the Rehabilitation Act of 1973, 20 U.S.C., § 794 et seq.
- Saldana, J. (2012). *The coding manual for qualitative researchers*. Los Angeles, CA: Sage.
- Severance, T. A., & Starr, P. J. (2011). Beyond the classroom: Internships and students with special needs. *Teaching Sociology*, 39, 200-207.
- Sharpe, M. N., & Johnson, D. R. (2001). A 20/20 analysis of postsecondary support characteristics. *Journal of Vocational Rehabilitation*, 16, 169-177.
- Smith, J. B., Ray, R. E., Wetchler, J. L., & Mihail, T. (1998). Levels of fusion, triangulation, and adjustment in families of college students with physical and cognitive disabilities. *American Journal of Family Therapy*, 26, 29-38.
- Strauss, A., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures for developing grounded theory* (2nd ed.). Thousand Oaks, CA: Sage.
- The Carnegie Foundation for the Advancement of Teaching. (n.d.). *Classifications*. Retrieved from <http://www.carnegiefoundation.org/classifications>
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45, 89-125.

- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). Chicago: University of Chicago Press.
- Trammell, J., & Hathaway, M. (2007). Help-seeking patterns in college students with disabilities. *Journal of Postsecondary Education and Disability*, 20, 5-15.
- Van Gennep, A. (1960). *The rites of passage* (M. Vizedon & G. Caffee, Trans.). Chicago: University of Chicago. (Original work published in 1909)
- Wehman, P., & Yasuda, S. (2005). The need and the challenges associated with going to college. In. E. E. Getzel & P. Wehman (Eds.), *Going to college: Expanding opportunities for people with disabilities* (pp. 3-24). Baltimore, MD: Paul H. Brookes.
- Wilgosh, L., Sobsey, D., & Cey, R. (2008). Life management of post-secondary students with disabilities. *Developmental Disabilities Bulletin*, 36, 199-224.

Christina L. Blanch received her B.A. and M.A. degrees in anthropology from Ball State University and is in the process of earning her Ed.D. from Ball State University. Her experience includes working as an anthropologist for Archaeological Research Management and serving as a graduate assistant during her doctorate education. She is currently finishing up her dissertation on comic scholars, running MOOCs, and writing her own comic. Her research interests include using comics as teaching tools in higher education, specifically related to social issues such as perceptions of LGBT students and students with disabilities. Christina can be reached by email at christina.blanch@gmail.com.

Larry Markle is the director of Disability Services at Ball State University where he oversees the university's efforts to serve over 650 students with disabilities. Larry is a past president of the Indiana Association on Higher Education and Disability and serves on the review board for the Journal of Postsecondary Education and Disability. He was also the project director for "Ensuring a Quality Education for Indiana's Students with Disabilities," a grant funded by the U.S. Department of Education, Office of Postsecondary Education. Larry's research interests include the transition to higher education for students with disabilities and athletic opportunities for students with disabilities. Larry can be reached at lmarkle@bsu.edu.

## About the Authors

Roger Wessel received his B.A. degree from Lee University and M.S.Ed. and Ph.D. in Higher Education from Southern Illinois University at Carbondale. His experience includes working in multiple student and academic support offices (i.e., enrollment, evaluation, career, orientation). He is currently a Professor of Higher Education in the Department of Educational Studies at Ball State University. His research focuses on the academic and social integration of undergraduates, specifically students with disabilities. Roger can be reached by email at rwessel@bsu.edu.

Darolyn "Lyn" Jones received her B.S. degree in from Purdue University, MS degree in Language Education from Indiana University, and Ed.D. in Adult, Higher, and Community Education from Ball State University. As well, she completed post graduate work in both Library and Information Sciences and Curriculum from both Indiana University and Indiana State University. She is currently an assistant professor in the Department of English at Ball State University and the Education Outreach Director for the Indiana Writers Center. Lyn's research focuses on disability narrative studies, and she is a creative narrative nonfiction published writer. Lyn can be reached at ljones2@bsu.edu.

